

references were hypothetically combined in the manner suggested by the Office, *arguendo*, the resulting hypothetical apparatus would not render claims 1, 4 and 25-28 obvious. In particular, independent claims 1, 4 and 28 each recite an image input system comprising, *inter alia*, a measuring unit for measuring an object and for generating shape data of the object. Independent claim 25 recites an image input system comprising, *inter alia*, measuring means for measuring an object and for generating shape data of the object. Independent claim 27 recites an image input system comprising, *inter alia*, a plurality of measuring units for measuring an object and for generating shape data of the object.

In contrast, the Murata et al. patent does not disclose a measuring unit for measuring an object and for generating shape data of the object. Rather, the Murata et al. patent discloses an image synthesizing system that comprises an operator's control unit 12, a game space processing unit 13, an image synthesizing unit 1 and a CRT 46, wherein the image synthesizing unit 1 comprises an image supply unit 10 and an image forming unit 28 as illustrated in Figure 1 therein (see column 8, lines 16-23). As illustrated in Figure 1 of the Murata et al. patent, the image supply unit 10 includes a processing unit 15 and a 3-D image storage unit 16, and the processing unit reads out image data of a 3-D object to be arranged in game space from the 3-D image data storage unit 16 (see column 9, lines 58-61). In other words, the Murata et al. device does not include a measuring unit but, rather, operates on previously stored image data. This is consistent with the background information disclosed in the Murata et al. patent at column 1, lines 19-24 which refers to various image synthesizing systems known in the art for use in three-dimensional games,

airplane simulators or other vehicle simulators that have information of an image relating to a 3-D object which has previously been stored therein. Accordingly, it is evident that the Murata et al. patent does not disclose a measuring unit as claimed in independent claims 1, 4, 25, 27 and 28.

The Office's reliance on the Shimoni patent does not make up for the above-noted deficiency of the Murata et al. patent. The Office alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the coordinate transformation information allegedly disclosed in the Murata et al. patent a position of an axis of rotation if the object needs to be rotated as allegedly disclosed by the Shimoni patent. Accordingly, even if it were hypothetically possible, *arguendo*, to include information about a position of an axis of rotation as allegedly disclosed by the Shimoni patent into the Murata et al. image synthesizing system, the resulting hypothetical apparatus would still not render the present independent claims obvious at least because the resulting hypothetical apparatus would not have a measuring unit (or measuring means) as recited in independent claims 1, 4, 25, 27 and 28. Accordingly, withdrawal of the rejection against claims 1, 4 and 25-28 and allowance of the same are respectfully requested for at least these reasons.

In addition, Applicants respectfully submit that the Office's rejection does not make out a *prima facie* case of obviousness at least because it does not set forth proper motivation for combining the Murata et al. patent and the Shimoni patent. The Office Action states that the Murata et al. patent discloses an image synthesizing system. The Office Action

also acknowledges that the Murata et al. patent does not disclose rotation of an object nor coordinate transformation information that includes a position of an axis of rotation. The Office suggests that the Shimoni patent discloses rotation of an object about an axis where different locations of the object are viewed and further that the Shimoni patent discloses determining coordinate information on the basis of different locations of the object, wherein the coordinate information includes at least one of a position of the axis of rotation and a relative angle of rotation. The Office alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the coordinate transformation information allegedly disclosed in the Murata et al. patent a position of an axis of rotation if the object needs to be rotated as allegedly disclosed by the Shimoni patent.

First, Applicants respectfully submit that the Office's rejection does not set forth proper motivation for combining the Murata et al. patent and the Shimoni patent at least because the Office's motivation presumes the presence of an object to be measured in connection with the Murata et al. apparatus, but no such measurement object is disclosed in the Murata et al. patent. For reasons discussed above, it is evident that the Murata et al. patent does not disclose a measuring unit for measuring an object. Similarly, the Murata et al. patent does not disclose an object to be measured. Accordingly, the Office's alleged motivation to combine the applied references is improper at least because there is no measurement object disclosed in the Murata et al. patent to allegedly be rotated.

Accordingly, withdrawal of the rejection and allowance of claims 1, 4 and 25-28 are respectfully requested for at least this additional reason.

In addition, Applicants respectfully submit that the Office's rejection does not set forth proper motivation for combining the Murata et al. patent and the Shimoni patent at least because the Office's stated reason for the combination relies on a hypothetical condition -- if the object to be measured needs to be rotated -- for which the Office has not provided any motivation. In other words, even if, *arguendo*, an object to be measured were present in connection with the Murata et al. device, the Office has provided no reason for why one of ordinary skill in the art would have been motivated to rotate such a hypothetical object. An assumption by the Office that one of ordinary skill *might* have been motivated to rotate a hypothetical object in connection with a hypothetical modification of the Murata et al. device does not meet the requisite standard for an obviousness rejection; rather, the Office has the burden to show that the motivation for a suggested modification is present in the prior art. Accordingly, withdrawal of the rejection and allowance of claims 1, 4 and 25-28 are respectfully requested for at least this additional reason.

Further, Applicants respectfully submit that one of ordinary skill in the art would not have been motivated at the time the invention was made to modify the Murata et al. apparatus to include a measuring unit for measuring an object and for generating shape data of the object. As noted above, the Murata et al. patent discloses an image synthesizing system comprising an operator's control unit 12, a game space processing unit 13, an

image synthesizing unit 1 and a CRT 46, wherein the image supply unit 10 further comprises a processing unit 15 and a 3-D image data storage unit 16. As disclosed at column 8, lines 24-34, the game space processing unit 13 sets a game space based upon a game program stored in a central processing unit 14 and a control signal from the operator's control unit 12. The game space processing unit 13 computes setting data of a game space defined by positions and directions of 3-D objects such as airplanes, mountains, and buildings. In other words, the Murata et al. patent is directed to game devices or simulation devices, and has no bearing whatsoever on object measurement devices for measuring shape data of an object. As far as the Murata et al. device is concerned, any object data is previously obtained and stored in a memory for use by the simulation or gaming device.

In view of the nature of the Murata et al. device (i.e., a game device or a vehicle simulator), Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to include a measuring unit for measuring an object and generating shape data of an object as part of the Murata et al. device at least because it would be viewed as undesirable and unnecessary. Game devices and vehicle simulators of the type disclosed in the Murata et al. patent simply have nothing to do with measuring shape data of an object. Accordingly, withdrawal of the rejection and allowance of claims 1, 4 and 25-28 are respectfully requested for at least this additional reason.

The Shimoni patent, on the other hand, discloses an apparatus for obtaining a set of two-dimensional views of a body and for successively displaying the set of views on a

display screen, which shows the body as rotating about an axis (see, e.g., abstract of Shimoni). Figure 1 of the Shimoni patent illustrates an imaging means 3, which can be a gamma camera, an x-ray device, or a transmission CT device for obtaining two-dimensional views of a patient's body (see column 5, lines 4-35).

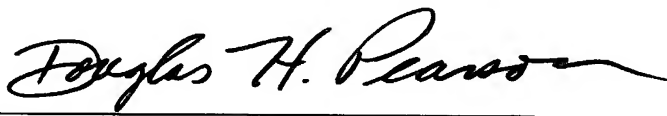
Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to modify the Murata et al. device to include a measurement unit of a gamma camera, an x-ray device, or a CT transmission device as disclosed in the Shimoni patent at least because these are medical devices in the context of the Shimoni patent. The Murata et al. patent, in contrast, contains no disclosure relating to obtaining two-dimensional views of a patient's body in a medical context. Accordingly, Applicants respectfully submit that there would be no motivation to combine the Murata et al. patent and the Shimoni patent for at least this additional reason. Withdrawal of the rejection and allowance of claims 1, 4 and 25-28 are respectfully requested for at least this additional reason.

Having addressed all the rejections set forth in the Office Action, withdrawal of the rejections of record and allowance of claims 1, 4 and 25-28 are respectfully requested. Moreover, given that independent claim 28 is generic to claims 1-6 and 25-26, it is respectfully requested that claims 2, 3, 5 and 6 be rejoined and allowed with the application.

Should there be any questions in connection with this application, the undersigned respectfully requests that he be contacted at the number below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:   
Douglas H. Pearson  
Registration No. 47,851

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: September 2, 2003



Patent  
Attorney's Docket No. 009683-373

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of )

Eiro FUJII et al. )

Application No.: 10/075,230 )

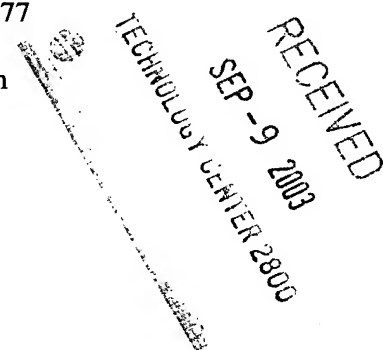
Filed: February 15, 2002 )

For: MEASURING SYSTEM WITH )  
IMPROVED METHOD OF READING )  
IMAGE DATA OF AN OBJECT )

Group Art Unit: 2877

Examiner: H. Pham

Conf. No. 9729



**REQUEST FOR ACKNOWLEDGMENT OF  
CONSIDERATION OF INFORMATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Further to the Office Action mailed May 8, 2003, Applicants respectfully request that the Office acknowledge in writing that JP 4-259809 has been considered by the Office and made of record, as discussed further below.

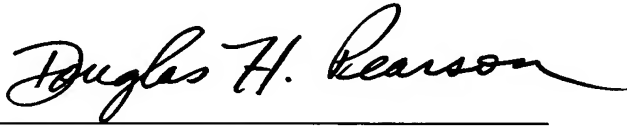
The PTO 1449A form submitted with the Information Disclosure Statement (IDS) dated February 15, 2002 mistakenly included two occurrences of JP 4-259809 listed thereon, whereas JP 4-259809 should have been listed on the PTO 1449A form only once. The PTO 1449A form returned by the Office with the November 20, 2002 Office Action included the Examiner's initials next to the first occurrence of JP 4-259809, but both occurrences were stricken with a line therethrough. It appears that the Examiner's markings in this regard may mean that JP 4-259809 has been considered by the Examiner and made of record and that the second occurrence of JP 4-259809 on the PTO 1449A form was stricken because it was a duplicative entry. In this regard, it appears that the line drawn through the first occurrence of JP 4-259809 may have been an oversight.



To clarify the record, Applicants request written confirmation that JP 4-259809 has been considered and made of record. In addition Applicants would appreciate the Examiner's assistance in taking appropriate steps to ensure that JP 4-259809 appears as a cited reference on any patent issuing from the present application. The undersigned apologizes for any inconvenience that the duplicative listing of JP 4-259809 may have caused.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:   
\_\_\_\_\_  
Douglas H. Pearson  
Registration No. 47,851

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: September 2, 2003